

JEN-0111-P

**IN THE CROSS-REFERENCE TO RELATED APPLICATIONS:**

Please amend the cross-reference to related applications as follows:

**Cross-Reference to Related Applications:**

This application is a continuation-in-part of U.S. Patent Number 6,653,365 (Application Serial No. 10/136,031 filed April 30, 2002), which claims the benefit of U.S. Provisional Patent Application Serial No. 60/287,918 filed May 1, 2001 and U.S. Provisional Patent Application No. 60/338,116, filed November 8, 2001. This application further is a continuation-in-part of U.S. Patent Application Serial No. 10/452,269 filed June 2, 2003. All of the foregoing being fully incorporated herein by reference.

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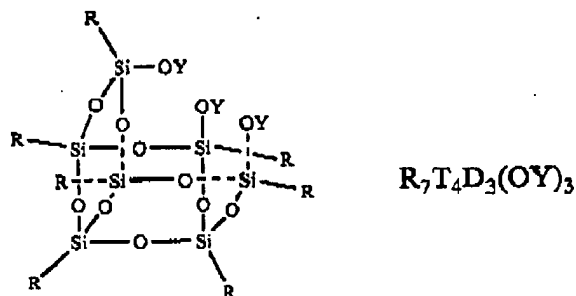
**IN THE SPECIFICATION:**

Please amend the Specification paragraphs [0005] and [0017] as follows:

[0005] Resin compositions suitable for use with dental restorations are well known in the art, and generally comprising ethylenically unsaturated groups that are polymerizable. Especially useful are the polymerizable acrylate or methacrylate resins such as those disclosed in U.S. Patents No. 3,066,112 to Bowen, No. 3,179,623 to Bowen, No. 3,194,784 to Bowen, No. 3,751,399 to Lee et al., No. 3,926,906 to Lee et al., and commonly assigned U.S. Patents No. 5,276,068 and No. 5,444,104 to Waknine, all of which are incorporated herein by reference. Other suitable resin materials include, but are not limited to, various polyurethane dimethacrylates (PUDMA), diurethane dimethacrylates (DUDMA), and other monomers and oligomers known in the art. A useful monomer disclosed in U.S. Patent No. 5,276,068 and 5,444,104 to Waknine is polycarbonate dimethacrylate (PCDMA) which is the condensation product of two parts of a hydroxyalkylmethacrylate and 1 part of a bis(chloroformate). Another advantageous resin having lower water sorption characteristics is an ethoxylated bisphenol A dimethacrylate (EBPDMA) as disclosed in U.S. Patent No. 6,013,694. An especially important methacrylate resin is the condensation product of bisphenol A and glycidyl methacrylate, 2,2'-bis [4-(3-methacryloxy-2-hydroxy propoxy)-phenyl]-propane (hereinafter abbreviated "Bis-GMA"). Included within the scope of the resin compositions herein are the resin compositions suitable for use with glass ionomer cements, including polycarboxylic acids such as homo- and copolymers of acrylic acid and/or itaconic acid.

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[0017] Another preferred POSS monomer includes those of the general formula  $R_7T_4D_3(OY)_3$



wherein R and Y are as defined previously for the  $R_7T_8Y$  POSS monomer; T is  $SiO_{1.5}$ , and D is  $SiO$ .

[0021] Alternatively, the POSS monomer comprising at least one Y group having reactive functionality may further be synthetically modified to form a "modified POSS". A "modified polyhedral oligomeric silsesquioxane" ("modified POSS") is the reaction product of a POSS monomer comprising at least one Y group having reactive functionality and an organic compound comprising two or more reactive functionalities at least one of which reacts with Y functionality. For example, a POSS monomer according to the general formula  $R_7T_8Y$  may be converted to a modified POSS of formula  $R_7T_8J$  by the reaction of the reactive functionality of the Y group with an organic compound ( $J^*$ ) which comprises two or more reactive functionalities to result in a J group, which is the reaction product of Y and  $J^*$ . J preferably comprises one or more functional groups that is reactive with at least one component of the resin composition. Reactive groups suitable for the functional group of J include, for example, halide, alcohol, amine, isocyanate, acid, acid chloride, silanols, silane, acrylate, methacrylate, olefin, and epoxide. The particular methods by which the functional group of Y can be synthetically modified to result in J groups can readily be determined by one of ordinary skill in the art without undue experimentation. An example of preparing a modified POSS includes reacting a POSS monomer according to the formula  $R_7T_8Y$  wherein the functional group on Y is an epoxide with one equivalent of  $J^*$  which is a (meth)acrylic acid in the presence of an appropriate catalyst and solvent, and optional heating. The resulting modified POSS would be the reaction product  $R_7T_8J$  wherein the J group comprises (meth)acrylate functionality and the secondary hydroxy from the ring opening reaction.